

Review Sheet – Test on Addiction and the Brain

Addiction

- Siegal Study on Drug Overdose
 - o How was it set up and what were the results?
 - o Where is a drug overdose most likely to occur for humans, according to this study?
 - o Connect to Compensatory Response
- What is the disease model?
 - o The Neuroadaptive Model
 - What are neurotransmitters?
 - Serotonin
 - Dopamine
 - o The Severing of the “Stop-Go” Connection
 - Connection to relevant parts of the brain – Frontal Cortex and Limbic System.
 - Story of Phineas Gage – how like a drug addict?
- Know statistics and results of studies from Addiction Worksheet – know which ones support the disease model and which do not.
- What is Alexander’s Model?
 - o What is his opinion about the studies done with rats? How does this lead him to creating Rat Park?
 - o Two Rat Park studies – how was each one set up and how did each turn out?

The Brain

- The Neuroscientific Perspective
- Know the 3 major systems of the brain and their general function, and the important parts within each system.
 - o Brainstem
 - Medulla
 - Pons
 - Reticular Formation
 - Cerebellum
 - o Limbic System
 - Thalamus
 - Amygdala
 - Hippocampus
 - Hypothalamus
 - o Cerebral Cortex
 - Visual Cortex
 - Auditory Cortex
 - Somatosensory Corte
 - Motor Cortex
 - Association Areas
 - Language Areas
 - Broca’s Area
 - Wernicke’s Area
- Split Brain
 - o Corpus Callosum
 - o Right Hemisphere functions
 - In charge of which side of the body? Takes in info from which side?
 - o Left Hemisphere functions
 - In charge of which side of the body? Takes in info from which side?
- Understand the idea that the brain determines our reality
 - o Phantom Limb
 - o Synesthesia
- Neuroplasticity
- Know the cases from the brain activity sheet we worked on in class and how each case connects to specific parts of the brain.